



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,008	03/29/2006	Satoshi Goishihara	0020-5477PUS1	4342
2292 7590 02/14/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER STEPHENS III, JOSE S				
ART UNIT 4193		PAPER NUMBER		
NOTIFICATION DATE 02/14/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/574,008

Applicant(s)

GOISHIHARA ET AL.

Examiner

JOSE S. STEPHENS III

Art Unit

4193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 17-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date 3/29/06, 6/26/06, & 8/31/07
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 14, line 9 "polyethylenenaphthalate" should be changed to --polyethylene naphthalate--.
Appropriate correction is required.

Claim Objections

2. Claims 28, 30, 31, and 33 are objected to because of the following informalities: "can be" should be changed to --is-- in claims 28, 30, 31, and 33. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 23, 24, 26- 29, 31, 32, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirose et al. (US Patent 4,955,471).

With respect to claim 23, figures 2-4, Hirose et al. teaches an electrode material package 21, characterized in that it comprises: a plurality of rolls of electrode materials 3, each of which is wound onto a winding core 4, cushion materials 18, each of which is interposed between the rolls of the electrode materials, a skid shaft 16 which passes

through the winding cores, on each of which the roll of the electrode material is wound, and the cushion materials to thereby support them thereon, and a moisture proof casing 9, which encloses the rolls of the electrode materials and the cushion materials, and is removably attached to the skid shaft.

With respect to claim 24, figures 2-4, Hirose et al. teaches a pair of flanges 7 which hold the rolls of the electrodes 3 and the cushion materials 18, and each of which has a larger side face than a contour of the roll of the electrode material.

With respect to claim 26, figures 8(a)-8(c), Hirose et al. teaches the casing 25 comprises a casing body 25b and a lid 25a fixed to the skid shaft 16.

With respect to claim 27, figures 8(a)-8(c), Hirose et al. teaches the casing comprises a casing body 25 and a lid fixed to the skid shaft 16, and the lid functions as one of the pair of the flanges 25a.

With respect to claim 28, figures 2-4, Hirose et al. teaches an electrode material package 21, characterized in that it comprises: a support shaft 16 for supporting one or more rolls 3, each of which comprises a hollow cylindrical core (center of the rolls 3) and wound layers of a continuous sheet wound thereon, the support shaft passing through the hollow cylindrical core of the roll, a base plate 7 which extends from the support shaft to the extent larger than a radius of the roll, and which supports a whole side face of the wound layers of the continuous sheet through a cushion material 18, an end plate 7 which extends from the support shaft to the extent larger than the radius of the roll, and which supports a whole side face of the wound layers of the continuous sheet through a cushion material, and presses the same toward the base plate, a cushion

Art Unit: 4193

material, which is provided when two or more of the rolls are provided, and which is compressed between the whole side faces of the wound layers of adjacent rolls, and a cover which covers the rolls supported on the support shaft, the thickness of the cushion materials in the longitudinal direction of the support shaft being selected, so that at least one space can be formed, between the core of the roll and the base plate, between the core of the roll and the end plate, and between the cores of the adjacent rolls if two or rolls are provided.

With respect to claim 29, figures 2-4, Hirose et al. teaches the cover is a transparent cover 9, which is connected to the peripheral edge of the base plate 7 to seal the roll supported on the support shaft 16.

With respect to claim 31, figures 2-4, Hirose et al. teaches the cushion material 18 is provided with a cutout portion (center of cushion material 18) through which the space can be confirmed from outside.

With respect to claim 32, figures 2-4, Hirose et al. the cover is a transparent cover, which is connected to the peripheral edge of the base plate 7 to seal the roll supported on the support shaft 16.

With respect to claim 34, figures 8(a)-8(c), Hirose et al. teaches a stand 25a for a package.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US Patent 4,955,471) in view of Fujio et al. (US 2003/0124329).

With respect to claim 17, figures 2-4, Hirose et al. teaches a package film 9 for packaging an electrode material 3. Hirose et al. does not teach a moisture proof layer of an aluminum foil, and an intermediate layer of an oriented nylon, which is located inside of the moisture proof layer and faces the electrode material. However, in [0063], lines 3-4 Fujio et al. recites "a composite film comprising a polyolefin film and aluminum foil laminated thereto and impervious to oxygen and water vapor". Fujio et al. also recites "The oriented nylon (ONy) film" in line1 of [0110], and thus teaches a moisture proof layer of an aluminum foil, and a layer of an oriented nylon. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the package film of Hirose et al. by incorporating a moisture proof layer of an aluminum foil, and an intermediate layer of an oriented nylon, as taught by Fujio et al., to protect the electrode material from being damaged by out side elements such as moisture. Thus the combination as discussed meets all of the limitations of claim 17.

With respect to claim 18, the combination of Hirose et al. and Fujio et al. teach all the limitations of claim 17. Fujio et al. recites "The oriented nylon (ONy) film, polyethylene terephthalate (PET) film and low density polyethylene (LDPE) film" in lines 1-3 of [0110], and thus teaches a layer of PET and a layer of LLD-PEF. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

Art Unit: 4193

made to modify the package film of Hirose et al. by incorporating a layer of PET and a layer of LLD-PEF, as taught by Fujio et al., as the outermost layer (PET) and innermost layer (LLD-PEF) because using these as films provides many advantages, like good flexibility and high strength. Thus the combination as discussed meets all of the limitations of claim 18.

With respect to claim 19, in figures 2-4, Hirose et al. teaches an electrode material package 21, characterized in that it comprises: a roll of an electrode material 3 which is wound onto a winding core 4, a pair of flanges 7 which hold both sides of the roll of the electrode material through a pair of cushion materials 18, and which have a side face larger than a contour of the roll of the electrode material, and a package film which packages the roll of the electrode material. Hirose et al. does not teach the package film comprising a moisture proof layer of an aluminum foil, and an intermediate layer of an oriented nylon, which is located inside of the moisture proof layer and faces the electrode material. However, in [0063], lines 3-4 Fujio et al. recites "a composite film comprising a polyolefin film and aluminum foil laminated thereto and impervious to oxygen and water vapor". Fujio et al. also recites "The oriented nylon (ONy) film" in line 1 of [0110], and thus teaches a moisture proof layer of an aluminum foil, and a layer of an oriented nylon. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the package film of Hirose et al. by incorporating a moisture proof layer of an aluminum foil, and an intermediate layer of an oriented nylon, as taught by Fujio et al., to protect the electrode material from being

damaged by out side elements such as moisture. Thus the combination as discussed meets all of the limitations of claim 19.

With respect to claim 20, the combination of Hirose et al. and Fujio et al. teach all the limitations of claim 19. The combination also teaches the winding core (figure 2(b), reference number 4 of Hirose et al.), on which the roll of the electrode material (figure 2(b), reference number 3 of Hirose et al.) is wound, is secured to the flange (figure 2(b), reference number 7 of Hirose et al.) with screws (figure 2(b), reference number 12 of Hirose et al.), so that the pair of flanges hold the roll of the electrode material. Thus the combination as discussed meets all of the limitations of claim 20.

With respect to claim 21, the combination of Hirose et al. and Fujio et al. teach all the limitations of claim 19. The combination also teaches the winding core (figure 2(b), reference number 4 of Hirose et al.), on which the roll of the electrode material (figure 2(b), reference number 3 of Hirose et al.) is wound, is projected from the roll of the electrode material to pass through the flange (figure 2(b), reference number 7 of Hirose et al.), and the projected portion of the winding core is provided with an outer thread, with which a stopper ring (figure 2(b), reference number 17 of Hirose et al.) is engaged, so that the pair of flanges hold the roll of the electrode material. Thus the combination as discussed meets all of the limitations of claim 21.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US Patent 4,955,471) in view of Fujio et al. (US 2003/0124329), as discussed in claims 17-21 above, in further view of Fukugawa et al. (US Patent 6,619,478).

With respect to claim 22, the combination of Hirose et al. and Fujio et al. teach all the limitations of claim 19. The combination also teaches the winding core (figure 2(b), reference number 4 of Hirose et al.), on which the roll of the electrode material (figure 2(b), reference number 3 of Hirose et al.) is wound, has a center hole extending along its longitudinal axis. The combination does not teach a pair of core caps are provided on outer sides of the pair of flanges, each of the core caps passing through the flange to engage with the center hole of the winding core, and each of the core caps is engaged into the center hole of the winding core through the flange, so that the pair of flanges hold the roll of the electrode material. However, Fukugawa et al. teaches a pair of core caps 4a. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hirose et al. and Fujio et al. by incorporating the core caps, as taught by Fukugawa et al., so that the pair of flanges holds the roll of the electrode material. Thus the combination as discussed meets all of the limitations of claim 22.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US Patent 4,955,471) in view of Ishii et al. (US Patent 6,004,733).

With respect to claim 25, Hirose et al. teaches all the limitations of claim 23. Hirose also teaches one end portion of the skid shaft is enclosed in the casing 9, one end portion of the skid shaft 16 is engaged with a stopper ring 17, and the other end portion of the skid shaft is provided with a flange portion 7, so that the rolls of the electrode materials 3 are held between the flange portion of the skid shaft and the stopper ring. Hirose et al. does not teach one end portion of the skid shaft is projected

out of the casing. However, in figure 1, Ishii et al. does teach one end portion of the skid shaft 11 is projected out of the casing 16. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify skid shaft of Hirose et al. by making one end of the skid shaft project out of the casing, as taught by Ishii et al., for the purpose of being able to attach the end that protrudes out of the casing to another object to keep it stationary. Thus the combination as discussed meets all of the limitations of claim 25.

7. Claims 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US Patent 4,955,471) in view of Posso (US Patent 4,762,223).

With respect to claim 30, figures 2-4, Hirose et al. teaches all the limitations of claim 29. Hirose et al. also teaches an annular connection ring 17 is further provided, which tightens up the peripheral sides of the transparent cover 9 and the base plate to connect them. Hirose et al. does not teach a connection ring is provided with a lever member with which the tightening up operation can be competed in one touch. However, Posso teaches a connection ring 1 is provided with a lever member (figure 1) with which the tightening up operation can be competed in one touch. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection ring of Hirose et al. by incorporating the lever, as taught by Posso, for the purpose of tightening up the annular connection ring. Thus the combination as discussed meets all of the limitations of claim 30.

With respect to claim 33, figures 2-4, Hirose et al. teaches all the limitations of claim 32. Hirose et al. also teaches an annular connection ring 17 is further provided,

Art Unit: 4193

which tightens up the peripheral sides of the transparent cover 9 and the base plate 7 to connect them. Hirose et al. does not teach the connection ring is provided with a lever member with which the tightening up operation can be competed in one-touch. However, Posso teaches a connection ring 1 is provided with a lever member (figure 1) with which the tightening up operation can be competed in one touch. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection ring of Hirose et al. by incorporating the lever, as taught by Posso, for the purpose of tightening up the annular connection ring. Thus the combination as discussed meets all of the limitations of claim 33.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Muyll et al. teaches a flange for a roll.

Toral et al. teaches a multipack for magnetic tapes wound onto hubs.

Bond teaches a package construction for coilable material and method of packaging and dispensing same.

Cothran et al. teaches packaging rolls with improved end-suspension support panels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSE S. STEPHENS III whose telephone number is (571)270-3797. The examiner can normally be reached on M-F, alternate F off.

Art Unit: 4193

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on 571-272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSS

/Long Nguyen/
Supervisory Patent Examiner
Art Unit 4193